

IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

Claims 1-21 (canceled)

22. (currently amended) A process for preparing a human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ comprising:

- (a) preparing a cell culture support coated on a surface, wherein the cell culture support is comprised of a polymer, which is homo- and/or co-polymer of N-isopropylacrylamide ~~which shifts from a dehydrated state to a hydrated state in the temperature range of 0-80°C but the cell culture support is not a mixture of a polymer and collagen, wherein the polymer is obtained by polymerization of one or more monomers selected from the group consisting of (meth)acrylamide compounds, N- (or N,N-di)alkyl-substituted (meth)acrylamide derivatives, and vinyl ether derivatives;~~
- (b) cultivating the human cancer cells on the cell culture support at a temperature at which the polymer is dehydrated;
- (c) cooling the cell culture support to a temperature at which the polymer is hydrated, whereby a sheet of the human cancer cells is detached from the cell culture support ~~without being treated with a proteolytic enzyme or ethylene glycol bis(2-aminoethylether) tetraacetic acid (EGTA); and~~
- (d) transplanting the sheet of cancer cells to a specified site of a nude mouse or nude rat ~~non-human animal~~.

Claims 23-24 (canceled)

25. (withdrawn-currently amended) A human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ prepared by the process according to claim 22.

26. (currently amended) A method of selecting an anti-tumor agent comprising: administering a test substance to a human cancer cell-transplanted nude mouse or

nude rat ~~non-human animal~~ prepared according to claim 22 and selecting a test substance that reduces volume and/or weight of a tumor formed from the sheet of human cancer cells.

27. (currently amended) A process for preparing a human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ comprising: ~~the steps of~~

- (a) preparing a cell culture support coated on a surface with a polymer, which is the hydration force of which changes in a temperature range of 0-80 °C, wherein the cell culture support is not a mixture of a polymer and collagen, then a homo- and/or co-polymer of N-isopropylacrylamide;
- (b) cultivating the human cancer cells on the cell culture support ~~[[in]]~~ at a temperature region where ~~at which~~ the polymer has weak hydration force; thereafter
- (c) cultivating the human cancer cells on the support at ~~adjusting the culture solution to a temperature at which the polymer has a~~ strong ~~stronger~~ hydration force, whereby the cultured human cancer cells are detached from the cell culture support; ~~without being treated with a proteolytic enzyme or ethylene glycol bis(2-aminoethylether) tetraacetic acid (EGTA), and~~
- (d) transplanting the detached human cancer cells to a specified site of a nude mouse or nude rat ~~non-human animal~~ on which transplantation is to be performed.

28. (currently amended) The process for preparing a human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ according to claim 27, wherein the detached human cancer cells are in a sheet form.

29. (currently amended) The process for preparing a human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ according to claim 28, wherein ~~[[the]]~~ a human cancer cell~~[[s]]~~ sheet to be transplanted is prepared in a specified shape of a specified size so that the size and/or shape of ~~[[the]]~~ cancer tissue in the nude mouse or nude rat ~~non-human animal~~ is controlled.

30. (currently amended) The process for preparing a human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ according to claim 27, wherein a carrier is placed in contact over the cultured human cancer cells at the end of cultivation and the human cancer cells are detached intact together with the carrier.

31. (currently amended) The process for preparing a human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ according to claim 27, wherein the human cancer cells are of a transplantable cell line.

32. (currently amended) The process for preparing a human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ according to claim 31, wherein the transplantable cell line is selected from the group consisting of HBC-4, BSY-1, HBC-5, MCF-5, MCF-7, MDA-MB-231, U251, SF-268, SF-295, SF-539, SNB-75, SNB-78, HCC2998, KM-12, HT-29, WiDr, HCT-15, HCT-116, NCI-H23, NCI-H226, NIC-H522, NCI-H460, A549, DMS273, DMS114, LOX-IMVI, OVCAR-3, OVCAR-4, OVCAR-5, OVCAR-8, SK-OV-3, RXF-631L, ACHN, St-4, MKN1, MKN7, MKN28, MKN45, and MKN74.

33. (currently amended) The process for preparing a human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ according to claim 27, wherein the human cancer cells of an untransplantable cell line.

34. (currently amended) The process for preparing a human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ according to claim 33, wherein the untransplantable cell line is selected from the group consisting of MGT-40, MGT-90, CS-C9, and CS-C20.

35. (currently amended) The process for preparing a human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ according to claim 27, wherein the human cancer cells are collected from a living tissue.

36. (currently amended) The process for preparing a human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ according to claim 27, wherein no more than 8×10^5 cells are transplanted.

Claims 37-39 (canceled)

40. (withdrawn-currently amended) A cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ prepared by the process according to claim 27.

41. (currently amended) A method of selecting an anti-tumor agent comprising administering a test substance to a nude mouse or nude rat ~~an animal~~ before and/or after transplanting human cancer cells ~~during preparation therein during preparation of a~~ human cancer cell-transplanted nude mouse or nude rat ~~non-human animal~~ by the process according to claim 27 and evaluating the effect of the administered test substance on tumor formation.

42. (new) The process for preparing a human cancer cell-transplanted nude mouse or nude rat according to claim 22, wherein the human cancer cells are detached from the cell culture support without being treated with a proteolytic enzyme.

43. (new) The process for preparing a human cancer cell-transplanted nude mouse or nude rat according to claim 22, wherein the human cancer cells are detached from the cell culture support without being treated with a proteolytic enzyme.